

PHILADELPHIA MEDICAL TIMES.

PHILADELPHIA, NOVEMBER 27, 1875.

ORIGINAL LECTURES.

TWO CLINICAL LECTURES

ON THE CAUSES, THE PREVENTION, AND THE CURE OF LACERATION OF THE FEMALE PERINEUM.

BY WILLIAM GOODELL, M.D.,

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LECTURE II.

YOU will remember, gentlemen, that, when we last met, I spoke of the causes and the prevention of laceration of the perineum, and left off after describing the primary operation for its cure. Now,

afflicted can be. Had she a diarrhoea or a cold, I should postpone the operation; for one untimely movement of the bowels, or the succussions from incessant coughing or from sneezing, would interfere with union. Were she nursing, I should, both for her sake and for that of the child, advise delay until the child is weaned. Nor should the operation be performed just before a monthly period, but a few days after. Early yesterday morning she took a full dose of oil, and this morning one grain of opium in order to restrain the bowels from further action. To avoid ether-vomiting, she has eaten a very light breakfast.

The instruments needed for this operation are as follows: an ordinary scalpel and a pair of scissors curved on the flat (Fig. 4); a long-handled rat-toothed for-

FIG. 4.

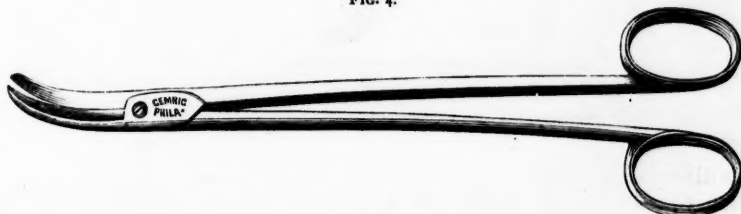
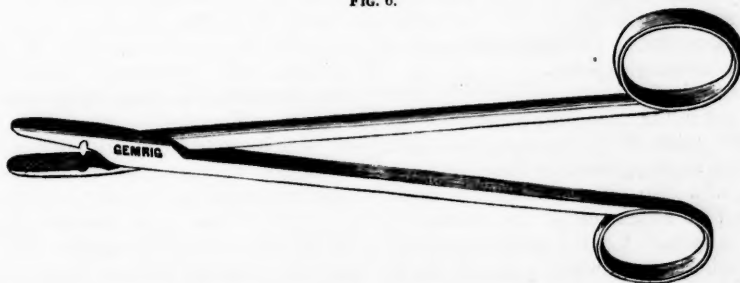


FIG. 5.



FIG. 6.



supposing you utterly fail to get union by the immediate introduction of sutures, what is next to be done? Wait until the wound has cicatrized, and the woman has wholly recovered from her lying-in. Then reconstruct her perineum by the operation which I am now about to perform upon the patient whom you saw at my last lecture.

She is in as fair health as a woman thus

ceps, with a hole in the end of the handle to serve as an adjuster (Fig. 5); half a dozen *serres-fines*; a few perforated "number-one" shot, and a shot-compressor (Fig. 6); a self-retaining catheter (Fig. 7); one blunt-edged perineal needle (Fig. 8), with an eye near its point; silver wire, several surgeon's needles with varying curves, and a needle-holder (Fig. 9). All these instru-

ments are, however, not absolutely essential. At a pinch a pair of flat-nosed jeweller's pliers will answer all the purposes of a shot-compressor or of a needle-holder. An ordinary flexible catheter secured in the urethra by strips of adhesive plaster makes a very good substitute for the self-retaining catheter. Instead of a special forceps with an adjusting hole in its handle, you can

and obscure it. I therefore introduce two fingers in the bowel, so as to put the overlying and rugous mucous membrane on the stretch, and begin the operation by trimming off the rectal edges of the rent, and by snipping off with the curved scissors a thin film of its mucous surface. This dissection is continued until the raw surface extends for at least an inch and a half up

FIG. 7.



FIG. 8.

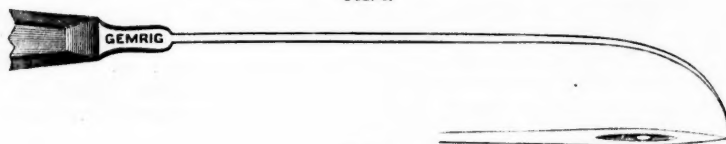
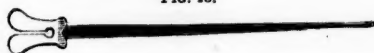


FIG. 9.



use an ordinary dissecting-forceps; while the tongue-tie slit in the handle of a grooved director (Fig. 10) makes an excel-

FIG. 10.



lent adjuster. I may also add that perforated shot are sold so cheaply by instrument-makers that to purchase a shot-punch will be a needless expense.

Deeply etherized, our patient will now be brought in the lithotomy position to the end of this table, which fronts a good light. Her knees are supported by these two gentlemen, who also place the fingers of the free hand on either side of the vulva, and stretch it open. A third assistant attends to the etherization, while a fourth looks after the sponges and instruments. Of course, one can operate with but three, or even with two, assistants, as has been my experience in the country; but it is far more satisfactory to have the aid of four. The first thing now to be done is to clip off the hairs around the rent, the next to pare its cicatrized edges. But if I should first denude the lateral surfaces, the blood would trickle down over the rectal portion

the posterior wall of the vagina. Partly by snipping with the scissors and partly by paring with the knife, I now denude the right side of the rent. By encroaching inwardly on the mucous surface of the vagina, and outwardly on the cutaneous surface of the nates, there is gained on the labium a raw surface a little longer and broader than the glazed cicatrix of the original perineum,—say about an inch in breadth,—and extending upwards to a point about half an inch below the meatus urethrae. The oozing of venous blood, you see, is quite free; and this is usually the case in all operations of this kind, because the parts are vascular, and the veins valveless. Close to the lower edge of the raw surface two small arteries are springing, but I shall not tie them, lest the ligatures should act as foreign bodies, and prevent union. By nipping each one with a *serre-fine* (Fig. 3) I stay the bleeding. In all operations in which you wish to avoid the use of ligatures, you will find these little spring-clips of great service. I shall leave them on until the wound is ready to be closed.

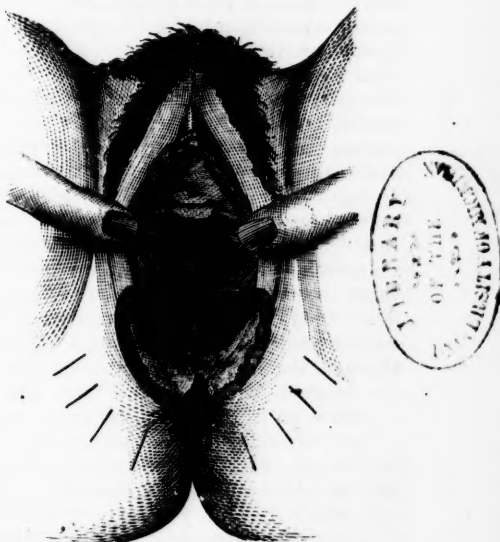
One side of the rent being now made raw, its exact counterpart on the other

side remains to be freshened. To gain accuracy in this, my assistants will for a moment remove their hands from the vulva, while I, by pressing for an instant the nates firmly together, get on the left side an exact blood-print of the raw surface of the right side. This manœuvre may not succeed if the *serres-fines* lie in the track of the wound, and you will then be guided by the eye alone. In denuding the left side I find it needful to use but one *serre-fine*. The cutting part of the operation is now finished, and results in a large raw surface, with symmetrical outlines, wider on the posterior wall of the vagina than on the labia. This form of raw surface gives greater strength to the parts, and imitates nature; for the natural perineum is wedge-shaped,—thickest at the cutaneous surface where the vulva and anus recede from each other, and thinnest where the vagina and rectum approach each other to form the recto-vaginal septum. When the recto-vaginal rent is a bad one, the denudation of the septum should be extended a little higher up the vagina than is represented in this diagram (Fig. 11). When, also, the rectum is much relaxed, and its mucous lining prolapses, it will be well to prolong the vivification of the cutaneous surfaces on each side downward to a level with the lower margin of the anal opening. The wound is now to be closed; but before doing so let me carefully sponge every part of the bleeding surface, to see whether any portion of mucous membrane or of skin has escaped the knife or the scissors. The recognition of such points is by no means as easy as you may think. Here, for instance, at the junction of the rectal and of one lateral portion of the wound, I find a suspicious-looking point. Whether it be a ridge of raw surface or an islet of mucous membrane, I cannot tell, and therefore, to be on the safe side, snip it off. The sutures are next to be passed; and since, gentlemen, upon the manner in which they are introduced will your success depend, I ask your close attention.

The perineal needle is entered unarmed on the left buttock, nearly half an inch below the lower angle of the wound, and about an inch from its margin (Fig. 11). For the first inch it is plunged in directly backward. Its point is then turned towards the vagina, and made merely to protrude as far as its eye on the mucous membrane

near the middle of the posterior vaginal wall, just above the uterine edge of the raw surface. The needle being now threaded with a piece of silver wire about a foot in length, and withdrawn, of course brings back with it the wire. It is then unthreaded, and entered at a corresponding point on the cutaneous surface of the other side, and the eye made to protrude on the mucous membrane at a point quite close to its fellow. The vaginal end of the wire is now passed through the eye of the needle, and, as I withdraw the latter, is left in its track. Thus you see that this first and most important stitch makes the

FIG. 11.



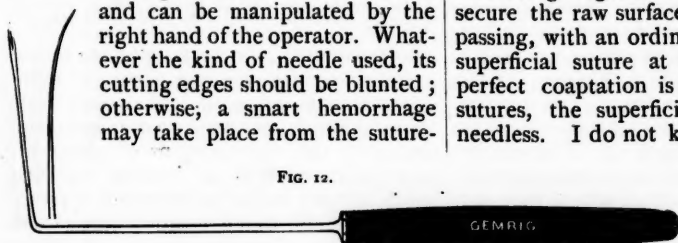
This diagram represents the primary and the secondary operation when the rent involves the recto-vaginal septum.

whole circuit of the rectal portion of the wound like the string of a purse. If tightened, it will purse up the tissues from below upward, and secure complete coaptation of the anal margins of the rent. Any other method of passing the first stitch is very liable to result in a recto-vaginal fistula, which is not easily closed up.

Remember, then, this golden rule in perineal surgery: *Whatever the degree of laceration, and whatever the nature of the operation,—viz., whether primary or secondary,—the point of entrance and of exit of the first suture should always be fully half an inch below the lowest angle of the wound.* When the sphincter ani is torn, as in the

case before us, these points will be on a level with the lower verge of the anal opening, or even a little below it. In a like manner, three other sutures are introduced at points about half an inch apart, and about an inch from the cutaneous margin of the lateral raw surfaces. In each instance the needle is at first pushed in directly backward, and then made merely to protrude on the mucous surface just above the line of denudation. As fast as each suture is placed, its ends are loosely twisted together, so as not to become entangled with its fellows.

Although this long-handled perineal needle is the handiest instrument for the introduction of these deep sutures, it is by no means indispensable. An ordinary surgeon's needle two and three-quarters of an inch long, and slightly curved, will answer the purpose well, if held in the bite of a needle-holder. Armed with the wire, it should be passed through one side first, and made to emerge wholly in the vagina. Being disconnected from the wire, it is now threaded with the loop-end of a double silk ligature, and entered on the cutaneous surface of the other side, and made to emerge as before into the vagina. The needle being now removed, the vaginal end of the wire suture is passed through the loop, and bent over it. As the latter is withdrawn the wire follows it, and is pulled through. For the convenience of right-handed physicians who are helpless with the left hand, some one has devised a left- and right-needle. The one which I show you (Fig. 12) is for the right cheek of the buttock, and can be manipulated by the right hand of the operator. Whatever the kind of needle used, its cutting edges should be blunted; otherwise, a smart hemorrhage may take place from the suture-



tracks, or an hæmatocele and abscess form in these very vascular parts. From such a cause, also, I have seen a good deal of ecchymosis on one cheek of the buttock.

I now remove the three *serres-fines*, and, as you see, the arteries have stopped bleeding and do not need to be tied. The general oozing of blood is, however, still

free, and this I shall try to staunch by directing upon the wound a stream of ice-water through the nozzle of a syringe. The cold douche checks it somewhat, but not fully; and this is my very uniform experience in this operation. Fortunately, the adjustment of the stitches will invariably control it: indeed, gentle traction on the ends of the wire sutures at once stops all oozing. After carefully sponging away the blood, I pass the ends of the lowest suture through the hole in the handle of the forceps, and, while drawing upon them, firmly push the latter down upon the skin. This manœuvre brings the parts together very accurately, "sets" the wire, and straightens out any crinkle in it. The adjuster being removed, a perforated shot is slipped over the ends of the wire. This is next seized in the jaws of the compressor, and, after being firmly pushed home, is clamped. Since the success of the operation depends mainly on this suture, and since the strain on it is greater than on any of the others, I shall bead the wire with a second shot, and clamp it over the first one. Each suture is in like manner secured by a single shot, and the free ends of the wire snipped off. One finger in the rectum and another in the vagina inform me that the wound is accurately closed. Carefully examining the cutaneous edges of the wound, I find between the deep stitches a point where two surfaces of skin seem doubled over upon each other, and one where two raw surfaces are everted from each other. With the forceps I gently unfold the former, and bring together the latter, and then secure the raw surfaces in apposition, by passing, with an ordinary curved needle, a superficial suture at each point. When perfect coaptation is gained by the deep sutures, the superficial ones are wholly needless. I do not know that the success

of the operation depends upon the use of the shot-clamps. The mere twisting together of

the wires is warmly advocated by some operators. But I have been so lucky with the former method—one which I learned from your distinguished teacher of surgery—that I shall be in no haste to change it.

The operation is now ended; but, before removing our patient to her bed, let me empty her bladder. While withdrawing

the catheter, I keep my finger closely applied to its mouth, so that the few drops of urine retained within it shall not escape and trickle over the wound. I also fold up a soft napkin, put it between her knees, and bind them loosely together.

Upon the after-treatment also will the success of this operation greatly depend. In order that no drops of urine may come in contact with the wound, and by irritation prevent union, I shall have her water drawn off. After the fifth day she may turn over on her hands and knees, and make water in that position. But the pain is so much increased by such a movement, that the catheter will generally be needed until the sutures are removed. Twice a day is usually often enough; but on several occasions I have met with an irritable bladder which urgently called for far more frequent evacuations. Should such a complication present itself, or should the nurse be unable to pass the instrument, or should your patient live at a distance, a winged catheter, or a double-curved, self-retaining one (Fig. 7), may be worn.

For fear of injury to the bladder, it should just pass the neck and not touch the fundus. By a piece of rubber tubing drawn over its mouth, the urine can be conducted into a vessel on the floor, and the bed kept dry and sweet. In introducing the catheter, one of two modes may be adopted. The physician either may pass it by the touch, with the woman lying on her back or on her side; or he may unbind her knees, slightly separate them, and introduce the instrument by the eye. The self-retaining catheter with its rubber tube should be daily removed, taken apart, and carefully cleansed. Otherwise urinary deposits will clog it up, or roughen its exterior surface, and may even produce cystitis. For instance, last year I was called into the country to operate on a perineal rent, which extended nearly one inch up the recto-vaginal septum, and was as usual caused by the use of the forceps. After the operation a self-retaining catheter was introduced, which, through some misunderstanding on the part of the attending physician, was not removed. At my next visit, a week later, I found, to my dismay, the lady in great pain, the catheter and tubing wholly clogged up, and the contents of an over-distended bladder dribbling away over the perineum. On cutting the sutures, to my surprise and great delight I

found that, in spite of these drawbacks, perfect union had taken place. But for two months thereafter the lady was annoyed by so distressing an attack of cystitis that she described herself as having fallen from the frying-pan into the fire. She ultimately got perfectly well; but it taught me a lesson which I wish to impart to you.

Our patient's bowels must also be kept locked up. Enough opium to ease the painful tension of the sutures—say one grain every four or every six hours—will probably be ample enough. Sometimes, after this operation, your patient will be annoyed by painful flatus. If it does not yield to teaspoonful-doses of the fluid extract of valerian, a flexible catheter should be carefully insinuated up into the rectum. Occasionally the wind will escape involuntarily, and, if your patient is fat, or lying on her back, she will think that she breaks it from the vagina, and will insist upon it that the operation is a failure. This happened not long ago to one of my private patients. It gave her and me much needless anxiety, for when the sutures were cut I found that perfect union had taken place. Here are the shotted sutures which were used in her case. The one beaded by two shot lay next to the anus; it is the longest one, and measures just 3.75 inches. I exhibit it especially to show you how long it is, and how much flesh it must have enclosed in its loop.

The only local dressing needed by our patient will be a pledget of lint, dipped into cold water. On the third day, but not earlier, lest the process of immediate union should be hindered, I shall have the vagina washed out twice daily by a weak solution of carbolic acid, or by a claret-and-water-colored solution of the permanganate of potassium. These injections will soothe the parts and correct the bad odor of the discharge. She will be enjoined to keep very quiet in bed. She need not rigidly lie on her back, but may, with help, turn over on her side. Her diet will be milk, toast, eggs, and broth.

Without reference to any specified time, the sutures will be removed as soon as they become loose,—that is, from the seventh to the ninth day. I shall not first snip all the sutures and then proceed to remove them, but shall cut one at a time and draw it out before touching the others. I shall also begin at the lowest wire,—the one next to the anus,—so that during the removal of

this the most important one of all, the parts may be firmly braced together by the upper sutures. Its fellow will next be cut and drawn out, and so on until all are removed.

On the tenth day, or on the twelfth if the line of union be weak, small doses of a saline cathartic or teaspoonful-doses of castor oil will be exhibited to our patient every four hours, until she feels an urgent inclination to go to stool. Then, in order to insure the liquefaction of the contents of the lower bowel, an injection of soap-water will be given. She will also lie on her back, with a shovel-bed-pan under her person, and be instructed to restrain all tenesmic efforts. Should hardened feces over-distend her rectum, the nurse will break them up either by her finger, a hair-pin, or the handle of a spoon.

At my next visit I shall carefully inspect the parts, to see whether the wound has been at all torn open by over-stretching. Should, unfortunately, a fistulous opening in the recto-vaginal septum remain, it may, if small, be treated by an application of the *acetum cantharidis* or of fuming nitric acid, followed by coaptation with *serres-fines* or with sutures, and, these failing, by the actual cautery. If the fistula be of any size, no treatment will probably be successful other than that of cutting through the united portion and of doing the original operation over again. Although the operation may be a successful one in respect to the union of the raw surfaces, yet usually the control over the sphincter does not at once return; sometimes, though rarely, it is not wholly regained. You must, therefore, be careful how you commit yourself to the promise of a rapid or a perfect cure.

After the bowels have been thoroughly opened, they should be again locked up for four or five days more, and then be daily kept open by a mild aperient. The patient should have her knees bound together and stay in bed for at least two weeks, and for a week longer should not go out of her room. During this time she should walk about but little, and keep her knees close together. Such precautions are necessary, in order that the newly-united tissue may not become relaxed by over-stretching.

In your text-books you will find described and illustrated different operations for the restoration of the functions of the sphincter ani, and for the reconstruction of the

perineum,—such, for instance, as the quill-suture, division of the sphincter, etc. But I have restricted you to one which recommends itself not only for its simplicity, but also for the very remarkable success which attends it. It, further, is an operation which, in conjunction with the amputation of the cervix uteri, you will find very valuable for prolapse of the womb, when the perineum is anatomically whole but functionally imperfect.

ORIGINAL COMMUNICATIONS.

LIVING LARVÆ IN THE EAR, AND METHODS FOR THEIR DESTRUCTION.

BY CHARLES H. BURNETT, M.D.,

Surgeon-in-Charge of the Philadelphia Infirmary for Diseases of the Ear.

IN some instances, usually in cases of chronic aural discharge, maggots develop in the auditory canal and even in the tympanic cavity after the ear has been invaded by the fly.

Kuntzmann,* Heine,† and Blake‡ have published accounts of the growth of maggots in the ear, and the latter authority has described minutely the apparatus with which these creatures maintain a hold in and lacerate the auditory canal and membrana tympani.

Having placed the living larvæ in a glass vessel containing a piece of raw meat and some warm water, Dr. Blake observed the motions and actions of the larvæ under the microscope.

He found that the apparatus by which the maggot makes and retains its hold is composed of a delicate horny frame-work, armed with two stout and horny hooks. By repeated extension and retraction of these hooks, brought about by a kind of telescopic motion of the bony framework, the animal pierces and tears the softest and warmest tissues it can lay hold upon, and hence it usually seeks the fundus of the auditory canal, and is sometimes found even in the tympanic cavity.

Larvæ of the *Muscida sarcophaga* (Blake and Gruber) and of the *Muscida lucilia* (Blake) have been found in the ear and

* Hufeland's Journal der Prac. Med., August, 1824, S. 108-111, and Lincke's Sammlung, ii. p. 178.

† Lincke's Sammlung, ii. p. 181 (Med. Zeitung, 1835).

‡ Archives of Oph. and Otol., vol. ii. no. 2.

watched through all stages of transformation. All accounts of finding these larvæ in the ear have shown that the organ attacked has been previously diseased, usually with a chronic purulent discharge, the odors of which attract the parent fly.

An apparent exception to this rule came under my notice not long since, in the Philadelphia Infirmary for Diseases of the Ear.

A young and intelligent woman stated that a day or two before her visit to the infirmary, while sitting sewing, she had been suddenly attacked with severe pain in a previously healthy ear. She was obliged to discontinue her work on account of the severity of the pain, and to apply a poultice to the ear.

The next morning she felt a tickling and crawling sensation in the ear, and upon removing the poultice, three maggots crawled from the affected ear. From that time all pain and discomfort ceased. All these statements were fully corroborated by the patient's mother, who accompanied her.

Unfortunately for the perfect substantiation of all these statements of the patient, the maggots had been thrown away, and I can only give the statement as it was given to me; but I am disposed to believe that maggots were to be found in this case, and that they came out of the ear on account of the softer pabulum offered by the poultice.

This, however, is only conjecture, and whether maggots ever voluntarily leave the ear after having obtained lodgment there can only be decided by future observation of their habits.

As I had considerable desire to find out a quick method of killing larvæ in the ear without injuring the organ attacked, as well as to observe their action, I made the following experiments:

A large fly, found upon the window-pane, was caught, and, by pressing, was forced to extrude about fifty live maggots, two millimetres long, and of a yellowish-white color. These were placed in a glass vessel, tightly corked, along with the dead parent fly, and nothing more. After twenty-four hours they were found to be still alive, thus showing their great tenacity of life. Some of them had crawled back again into the fly, and others crawled into her as I watched them.

I then placed a little piece of cold roast-beef, softened in water, into the glass vessel, for the maggots to live upon, and

allowed the vessel to stand upon a table, at the ordinary temperature of the room.

Twenty-four hours later I found the maggots very active, and grown to be five millimetres long, with their alimentary canals stained by the brown juices of the roast meat.

In order to try the effects of some easily-obtained fluids, innocuous to the ear, upon the maggots, I placed maggot No. 1 in a few drops of refined kerosene oil (Pratt's astral). It crawled repeatedly from the oil and continued to live, though it was constantly thrust back again into the test-tube containing the fluid, and kept submerged in the kerosene. After a vain endeavor for a half-hour thus to kill the maggot, it was killed in another way.

Maggot No. 2 was placed in a saturated solution of salicylic acid (bleached, prepared by Hance Bros. & White, of this city); it died in half an hour.

Maggot No. 3 I placed in alcohol, where it died in five minutes.

Maggot No. 4 was placed in æther fortior (Squibb's), and was killed thereby in two minutes.

Maggots Nos. 5, 6, and 7 were placed in a few drops of chloroform, which instantly killed them. A few drops added to the squirming mass in the glass vessel killed them all instantly.

Chloroform-vapor forced through the Eustachian tube has been found fatal to the life of these creatures when they have penetrated to the middle ear.*

An eighth specimen was placed in hydrant-water, which seems, as Dr. Roosa (*op. cit.*) has also observed, to make them more lively at first, and they continued to live in it and work their savage hooks for an indefinitely long time.

Water appears not to have the slightest power to arrest their work when they have once gained a hold in the soft tissues of the ear. This may be due to the stimulating effects of the oxygen in the water.

I examined these maggots, and found that they were armed with an apparatus for holding on and tearing similar to that described by Blake.

The number of maggots found in the ear varies from a few, six in Kuntzmann's case, to the large number a single fly may deposit.

From the experiments just narrated, it

* Roosa, Treatise on the Diseases of the Ear, p. 166.

seems probable that a few drops of chloroform instilled into the external auditory canal would kill all maggots found there, as well as those which have burrowed into the middle ear, without resorting to the use of chloroform-vapor through the Eustachian tube. If chloroform should be objected to in a case of larvæ in the ear, an almost equally potent means of killing the invaders may be found in ether, and, next to it, alcohol.

After the larvæ are killed it is often necessary to remove them from the auditory canal by means of forceps, so firm is the hold they gain upon the tissues they attack.

I observed, however, in those I examined a great tendency to leave the meat and migrate about the glass vessel, invariably in the end towards the mouth of the long glass test-tube in which they were confined, until at last the under surface of the cork was covered with them. This would naturally lead to the inference that in some cases where they attack the ear they may, for reasons unknown to us, let go their hold and escape from their confined position, perhaps in order to find earth in which to bury themselves.

In Kuntzmann's case (*loc. cit.*) the larvæ, when placed in a glass jar containing both earth and meat, preferred burying themselves in the earth to eating the meat. By some such desire on their part may be explained the fact that, in the case of the girl stated above, the maggots crawled from the ear to seek the poultice.

Why it is that in some cases so few maggots are found in the ear in comparison to the large number usually deposited by a fly elsewhere, when unmolested, may be due to the fact that the fly is interrupted when depositing her brood in or about the ear, or, as their extrusion is usually performed suddenly, some of the larvæ may fall short of the ear and perish.

PETROLEUM AS A DRESSING FOR ULCERS AND SUPPURATING WOUNDS.

BY COMEGYS PAUL, M.D.

IT has always been a desideratum in surgical practice to find a dressing that is at the same time useful and *inexpensive*. Between two articles of equal efficacy, the preference should be given to the one costing the least.

My purpose in this paper is to record some observations upon the use of petroleum as a useful and cheap surgical dressing. This mineral fluid seems to me to combine very especially the two properties of being *antiseptic* and *stimulating*, both of which are now recognized as a *sine qua non*, by surgeons of a varied experience, in the dressing of suppurating surfaces.

The question of germs or ferments need not be discussed in reference to the employment of petroleum, as they would seem to be equally influenced by the antiseptics most in use at the present time. The efficacy of the agent as diminishing purulent discharges, destroying fetor, and in this manner limiting the chances of septicæmia, is the object of all inquiry in this direction, together with its power to control fungous granulation and to stimulate reparative efforts.

The ordinary commercial petroleum sells at retail for four to eight cents a quart, and is to be found in the homes of most mechanics, laborers, and people in the lower walks of life.* It can be applied with little trouble or inconvenience, and, in cases where the surgeon is not prepared with his liniments and cerates, it can be used without subjecting him to delay and waste of time. That petroleum is *antiseptic* we have most excellent authority.

In the following case of extensive destruction of the cellular tissue in the arm of an Irish laborer about fifty years of age, I used it with great benefit.

The man had received a small scratch upon his middle finger, from which extended an inflammation reaching to the shoulder. The limb was intensely swollen and most painful, and the general condition became alarming in the extreme. There was a dry, brown, hard tongue, a rapid, feeble pulse, high temperature, and constant delirium. When fluctuation was detected, exit was given to a considerable amount of pus by an opening in the fore-arm, which afterwards discharged in large quantities from day to day. Large portions of the skin sloughed from the hand to the shoulder, and most of what remained was hanging loosely like a sleeve about the muscles underneath. In the mean time a formidable bed-sore developed over the sacrum, and an abscess over each hip. Every visit showed me an excessive discharge from the diseased tissues, and the drainage-tubes

* Besides using it for purposes of illumination, since its introduction as an article of commerce, it has been vested with therapeutic properties by the poor, as a cure for rheumatism, dyspepsia, and diseases of the lungs, having to a great degree superseded tar, their favorite in bronchitis and consumption.

freely running. When the formation of pus became partially checked by the application of antiseptic lotions and ointments and a supporting treatment, I found an appalling array of bottles and boxes, the expense of which suggested the necessity of an immediate reduction of further outlay. Petroleum was then used freely, and the discharge grew less; the smell was not greater than when carbolic acid had been the dressing, the edges united under its stimulating agency, and the sores gradually contracted, healing with a firm cicatrix. The bed-sore assumed a healthy appearance after the coal-oil had been applied for a few days, and repair advanced with gratifying rapidity. This man entirely recovered in ten weeks, with the usefulness of his arm in no way impaired.

A young woman convalescent from typhoid fever, through the carelessness and neglect of the nurse, formed a large sacral ulcer with a slowly separating slough and marked diminution of the vitality in the surrounding parts. It was dressed with petroleum alone,—lint saturated with the oil being packed into the entire cavity, and the whole retained by adhesive strips. It healed in a month, and at no time was there a bad smell or discharge of any account.

Further instances of the successful employment of petroleum might be cited, but only to detail similar results. I believe the petroleum to be most useful as an application to non-specific sluggish ulcers, and to all suppurating wounds that have a tendency to heal with an unhealthy and easily-ruptured cicatrix. I have not tested its utility in recent wounds or after surgical operations.

As an injection in sinuses, either connected or unconnected with diseased bone, the result will be satisfactory. In a bone-sinus it can be used without interruption, materially diminishing the discharge.

It is valuable in all inflammations of an erysipelatous character, being applied like an ordinary fomentation. The spreading of the disease is, apparently, favorably influenced, and the duration shortened in many cases.

Wounds dressed with petroleum should be thoroughly cleansed, then covered with saturated lint, and, where there has been deep-seated destruction of the tissues, charpie fully impregnated with it should be packed into the cavities, and the whole overspread with oiled silk, waxed paper, or a piece of muslin spread with lard.

The smell is not at all oppressive, but is

generally concealed by the covering, and does *not* cling to the fingers after ablution. The very decided objection to carbolic acid, the odor of which remains for hours about the person, is entirely avoided in using petroleum. The very little pain or smarting sensation which sometimes occurs at the moment of application subsides in a few moments.

SOLUBLE GLASS IN HOSPITAL CONSTRUCTION.

BY D. LUTHER, M.D.

A FACT constantly presented to my attention as General Agent of the State Board of Public Charities is that, notwithstanding all the improvements which of late years have been made in hospital construction and arrangement, a difficulty encountered in the household care of all, especially in those for the insane, remains without adequate remedy. I allude to the offensive odors with which so many of the apartments in them are infected. This occurs, as will be readily understood, from the filthy personal habits of many of the occupants. The insane and disabled, being incapable of self-care, exercise little or no control over the urinary or intestinal discharges, and no system of ventilation in use, nor arrangement of the interior departments occupied by them, whether of wood painted or oiled, floors of slate, metal, or cement, has been sufficient to effect entire purity or cleanliness. A perfect remedy for a difficulty so much complained of is, of course, a great desideratum.

Much attention has recently been given to it, and various methods have been suggested, and tried,—thus far, as already stated, without decided success. In devising plans for the purpose, one thing in every arrangement that may be proposed is essential, without a regard to which it is useless to hope for a beneficial result: it consists in *an entire absence of absorbing surface*. Material possessing this property being at command, its proper application is all that is required to overcome the long-endured reproach or trouble. To a partial extent slate and metallic coverings for the floors and walls have been tried. Both are subject to objections. Slate is dark and porous, and easily fractured. Zinc, enamelled iron, or boiler-plate iron is sometimes

resorted to, but also fails to give satisfaction. To paint either of these materials would defeat the object in view, as an absorbing surface would then be presented.

A substance free from all these objections is glass. The effect of its introduction in well-arranged dairies, in which atmospheric purity is so essential, has been eminently successful, and is suggestive of other applications which may be advantageously made of it. Why should not the floors, walls, and ceilings in apartments occupied by the helpless class to which I have referred be laid and covered with glass instead of wood and mortar? The material is not expensive, it is strong when made of sufficient thickness, is impervious to water and dampness, and admits of being made of suitable color. Apartments thus fitted up, and so located as to have the benefit of hose-attachments to the water-spigots, can be so drenched as effectually to remove every particle of fetid matter and all vestige of tainted effluvia. The floors may be made comfortable by covering them with rubber-cloth, which, with the bedding, may be easily removed and cleaned, so that no serious difficulty need be experienced in preserving the necessary cleanliness and purity. Nor need the benefits of this material be restricted to the purpose we have considered. It might be extended to other uses in hospital arrangement with great advantage, especially in the construction of water-closets and stationary wash-stands.

NOTE ON THE VALUE OF BELLADONNA AS A PROPHYLACTIC IN SCARLET FEVER.

BY EDWARD B. STEVENS, M.D.,
Professor of Materia Medica in Syracuse University.

ABOUT the year 1860, perhaps,—I am not quite certain as to that,—scarlet fever prevailed as an epidemic in Southern Ohio, especially so at Lebanon, where I then resided,—whole families being swept away. At that time I experimented with belladonna very fully, and, as I think, completely, carefully, and honestly. I placed children of several families very fully under the influence of belladonna; I pushed the remedy until I secured the constitutional effects,—especially the rash. When I got the eruption, I stopped the administration of the belladonna; but I

did in several families at that time push the belladonna until I had these well-marked constitutional manifestations. What was the result? Simply that scarlatina invaded those families just the same; and the most fatal cases I had in that epidemic were children who had been previously saturated to the degree of eruption by belladonna. I simply note this, as I think, very positive result of an experiment as to the prophylaxis of belladonna in scarlatina. My belief is that it has no control whatever.

ATROPIA IN OPIUM-POISONING.

BY S. W. MORRISON, M.D.

OCTOBER 16, 1875, 5 P.M., I was called to see an infant, aged four weeks, who had been given an indefinite amount of laudanum at about 10 A.M. of the same day. I found the pupils insensible to light; the breathing, nine respirations per minute; the extremities cold, and the child altogether insensible. The energetic slapping of its face with cold wet cloths also failed to arouse it. One drop of fluid extract of belladonna (Tilden's) was then given with a little aromatic spirits ammonia and brandy, and in a short time afterwards an electro-magnetic machine was made to operate on the child with all its strength, but without arousing it in the least.

At 6 P.M., about forty minutes after giving the first drop of belladonna, thinking the child was about to die, I exhibited two drops more of belladonna, with more brandy and ammonia, and continued the electric currents. At 6½ P.M., the battery began to arouse the infant, and I found its pupils soon after respond to light. Its recovery was then rapid and complete. My object in sending you this is to increase, if possible, the reliance of the profession on belladonna in these cases of opium-poisoning, and to show in what large doses it may be given.

LEWISVILLE, CHESTER COUNTY, PA., October 3, 1875.

NOTES OF HOSPITAL PRACTICE.

SERVICE OF PROF. LOUIS A. DUHRING, M.D.,
AT THE UNIVERSITY HOSPITAL.

Reported by ARTHUR VAN HARLINGEN, M.D.

PRURITUS GIVING RISE TO PECULIAR HALLUCINATION AND SUBJECTIVE SYMPTOMS.

THE patient is a woman 52 years of age, employed as a weaver in a cotton-factory. She is quite intelligent, and gives the history of her disease and its symptoms very clearly.

She is troubled, she says, by worms in the skin,—living animals, like ants, of

various sizes, from that of a caraway-seed to a quarter of an inch in length. They are jointed, and provided with bristles around the head, as she has positively ascertained by examination with a pocket-lens.

These animals are undoubtedly alive, she states, for when they first come from the body they move about, but soon die; placed on the stove they crack and jump off. They live in the skin itself or under it, and come to the surface spontaneously, biting greatly as they make their way out. They pervade all parts of the body, and frequently drop from the cheeks, nose, and forehead.

The affection originated about two years ago, having been preceded by an eruption of boils and sores in the head. Her health was good at that time; she was then quite stout, but has lost flesh since, and she is of the opinion that the "worms" have eaten her away.

Upon inspection, her skin is seen to be smooth, soft, and free from any sign of eruption and from scratch-marks. The closest inspection fails to show any of the described insects or any insects whatsoever; in fact, no trace of lesion is anywhere to be seen.

The patient first came under notice some days ago, and was directed at that time to bring some of the "worms" for inspection. This she failed to do on two successive occasions, alleging various excuses. On her third visit, however, she brought, wrapped up very carefully in the folds of a handkerchief, a number of small, solid, oval bodies, the size of a caraway-seed or larger, and, at first sight, looking very much like inspissated plugs of sebum from the larger sebaceous glands of the face. Closer examination showed these bodies to be composed of minute fragments of cotton or wool, without doubt derived from the underclothing, rolled up and cohering by the aid, probably, of the cutaneous secretions, so as to form variously-shaped, curious-looking bodies, having the general appearance of small insects.

We have here (remarked Dr. Duhring) a most circumstantial account of a disease which has absolutely no existence. This multitude of parasitic animals, which our patient assures us in the most emphatic language swarm everywhere over her body, have positively no being.

The foundation of the disorder lies, in all

probability, in a simple pruritus,—an affection of the terminal nerve-filaments of the skin. The sensation experienced is that not infrequently felt in this disease,—a peculiar crawling and creeping as of living things on the surface of the body. The patient experiencing these sensations has rubbed herself, expecting to find "worms;" and the fragments of wool, sebum, epidermis, etc., soon have assumed in her imagination the forms of the anticipated animalcules. There are positively no objective symptoms of disease.

The case is an instructive one, and interesting on account of the rarity of this odd form of pruritus. The text-books make no mention of it, and striking examples, such as the present, are but seldom met with in practice. The important point is to distinguish the disorder as one consisting solely of subjective symptoms. None of the parasitic diseases can cause exactly such symptoms, although the effects of phtheiriasis or lousiness are similar. It is scarcely necessary to say that pediculi are not present in the case before us.

The treatment should be largely moral; assure a patient that he will improve, and he is much more likely to do so. Of course, other means are not to be overlooked. This patient, when first seen, was bundled up in a great excess of clothing, under which perspiration was free and constant, and all the symptoms were aggravated. She was directed to remove a number of these superfluous wraps, was ordered a placebo, and told that in a few days she would begin to improve. Accordingly, she did so, and to-day declares herself much relieved. The diagnosis must, of course, be positively made out, for the treatment of phtheiriasis by moral means would hardly be likely to succeed.

[NOTE.—This patient was under observation for some months. She became much improved, but, the pruritus continuing, was placed upon the use of a tonic aperient mixture, and finally made a complete recovery. As she grew better she was gradually persuaded that the affection was not due to parasites, and finally renounced the idea entirely.—REP.]

PROFESSOR DEPAUL, of the Paris faculty, is stated to have been called to Brazil to attend the daughter-in-law of the Emperor. The fee, including travelling expenses, is to be between \$60,000 and \$70,000, gold.

TRANSLATIONS.

THE ACNE DUE TO BROMIDE OF POTASSIUM.—Th. Veill (*Centralblatt für die Med. Wissenschaften*, No. 37, 1875; from *Vierteljahrschr. f. Dermat. u. Syph.*, 1874) had the opportunity in an asylum for the feeble-minded and epileptics of making numerous observations on the eruptions on the skin due to the administration of the bromide of potassium. In regard to the size of dose necessary to cause the eruption, no rule can be given, for while in many cases small quantities suffice, in other patients the largest doses can be given without any rash being produced. This seems to be independent of the sex and also of the state of health of the patient. Those who were most severely affected in this way were patients whose skin was rather thick, and imparted a greasy sensation, owing to a free sebaceous secretion. If comedones and acne had previously existed, they increased under the administration of the drug, and no retrograde metamorphosis as described by Tilbury Fox was noticed. The eruption always made its appearance gradually, and was never acute and accompanied by febrile symptoms. It was not situated only on the face, shoulders, chest, and back, as is the usual form of acne, but also on the scalp, among the eyebrows, on the hairy parts of the thigh and leg, and, indeed, over the entire body, showing a preference for those portions of the cutaneous surface which are richly endowed with hair. The color of the eruption varies from light pink to deep bluish or even coppery red, and in its mode of development it corresponds to acne vulgaris. Papules of various sizes form, some of which pass into pustules of larger or smaller size, while others become covered with scales and gradually disappear. The acne increases with the amount of bromide administered, and diminishes in the same ratio. In some of the cases erythema nodosum of the inferior extremities was met with. Sometimes this erythema was diffuse, quite painful, and accompanied by febrile symptoms, and continued until the exhibition of the bromide was suspended. On two boys wheals appeared, which gradually became warty in appearance and ulcerated. The ulceration was deep and had no tendency to heal, but after the cessation of the use of the remedy soon

disappeared. On the face and thighs of one boy, aged sixteen years, large verrucæ such as are usually found on the hands made their appearance. The contents of the acne-pustules contained nothing characteristic. No bromine was found in them, and Dr. Veill is opposed to the hypothesis that this form of acne is due to a local irritation of the follicles caused by the excretion of bromine.

W. A.

CHANGES IN THE BRAIN DURING ABDOMINAL TYPHUS AND TRAUMATIC INFLAMMATION.—L. Popoff: *Centralblatt für die Med. Wissenschaften*, No. 37, 1875; from *Virchow's Archiv*.

In the brains of twelve patients who had died with typhus abdominalis, corresponding changes of an acute inflammatory character were found in the vessels, in the neuroglia, and in the ganglion-cells. The alterations seen in the vessels consisted of a proliferation of the cells of the walls or of a deposit of fat- and pigment-granules; those in the neuroglia, of division of the granules; and the changes noticed in the ganglion-cells comprised active processes of growth and the entrance of wandering cells. The former of these changes was manifested by division and increase of the granules, and also by division of the protoplasm, some segments of which contained nuclei, while others did not. Some of the wandering cells lay about the ganglion-cells in the so-called perivascular space, while others were within the cells themselves, and, in some cases, had given rise to division of these cells by their entrance. Many of such bodies fell out of the ganglion-cells during the preparation of the specimen, causing these to present a perforated appearance.

The wandering cells were also seen arranged in rows along the vessels and nerves, but were more plentiful in and about the ganglion-cells.

Essentially similar changes were found in inflammatory processes, and especially in those of traumatic origin, which had been produced in dogs and rabbits by various means. In these, however, the active changes of the nerve-elements preponderated, while in the brains of the typhus cases the presence of wandering cells could be fully made out before the evidences of proliferation of the ganglion-cells could be seen. Many cells containing granules were also found in the brains of the animals subjected to these experi-

ments which were wanting in those of the fever-patients. When coloring-matter, and more particularly India ink, was injected into the brains, it was found that a short time after the injection had been made the principal part of the matters which had been thrown in lay in the ganglion-cells, which had evidently taken it up by some property of their own, since there were no wandering cells containing pigment which could have acted as vehicles for its transmission, and nothing similar could be produced in the brains of dead animals.

At this stage of the process granule-cells were wanting; but they appeared in great profusion after the inflammation had lasted some time longer, and shut in the pigment, which could then be noticed in but slight amount in the nerve-cells. Popoff, from these observations, concludes that the nucleated cells which are commonly found in the brain in acute inflammation are altered nerve-cells.

W. A.

MECHANISM OF THE SO-CALLED LUXATION OF THE PENIS (*Wiener Med. Presse*, October 3, 1875).—Prof. Busch, writing of luxation of the penis, says that although recently attention has been repeatedly directed to this peculiar injury, yet its mechanism seems to be far from clearly understood, owing somewhat to the inappropriate name which has been bestowed upon it. He proceeds: The skin of the penis is more closely and intimately connected with that of the scrotum and the supra-pubic region than with the inner fold of the prepuce. In machinery-accidents in which the scrotum is seized, and, as it were, wound up by cog-wheels, the skin between the penis and scrotum does not tear, but the skin of the penis itself is torn away from its insertion at the inner fold of the prepuce, so that the latter remains behind, and, after its division and reflection, may serve as a covering for a large portion of the organ. If, on the contrary, the prepuce is seized in front of the penis and is drawn forward with sufficient force, the same separation between its inner and outer folds takes place, but at the same time the loose connection between the skin of the penis and scrotum and the penis itself is destroyed, and all that portion of cutaneous tissue is dragged forward and torn from the subjacent parts. It depends upon the direction in which the force is applied whether the penis, remain-

ing fastened to the pelvis, and playing a thoroughly passive rôle, is covered with skin drawn upwards over it from the scrotum, or downwards from the hypogastrium. In either case, however, it is the skin and not the penis itself which is dislocated.

J. W. W.

PRIMARY SARCOMA OF THE KIDNEY (Tellegen: *Centralblatt für die Med. Wissen.*, 1875, No. 38).—The patient, a woman, aged 50, had an intense fever which was subject to intermissions, with anæsthesia and hyperæsthesia of some portions of the skin, and pain in the left thigh. About eight weeks after the beginning of her illness, albumen made its appearance in the urine, and was accompanied by œdema of the lower extremities and of the face. Pain was soon felt in the region of the kidneys, and disturbances of vision and attacks of stupor also began to occur. After the albuminuria and accompanying dropsy had lasted twelve weeks, death took place while the patient was in a comatose condition.

At the post-mortem examination it was found that the cortical substance of both kidneys had been converted into firm, white masses containing some tubercles, from the surface of which the capsule could readily be torn.

The diagnosis of sarcoma was confirmed by the following considerations: 1, the absence of alveolar spaces; 2, the intimate connection of stroma and cells; 3, the development from interstitial connective tissue; 4, the absence of enlargements of lymphatic glands.

W. A.

INFLUENCE OF SYPHILIS ON CICATRICES AND FRACTURES (*Le Mouvement Médical*, October 2, 1875).—M. Dron reports the cases of two men, who, having been injured three or four years previously, were the bearers, one of extensive cicatrices, the other of a mass of callus surrounding an old fracture of the fore-arm. Under the influence of syphilis, in the first case the cicatrices became painful, and the seat of a tuberculous eruption; in the second case, as a result of the same cause, the callus softened to such a degree that it became necessary to apply an immovable dressing to sustain the arm in position, although it had previously been in perfect condition. Specific treatment speedily put an end to these disturbances, the cicatrices becoming indolent and the callus solid.

J. W. W.

PHILADELPHIA MEDICAL TIMES.

PHILADELPHIA, NOVEMBER 13, 1875.

EDITORIAL.

THE SICK POOR.

A PROBLEM which seems to be ever offering itself for discussion, because never solved and always pressing, is the proper means of affording medical relief to the poor. The baker does not provide the semi-starving poor with free bread, but custom and the humanitarian instincts of the profession bind the doctor to furnishing them with free medical services. It is not to the abject poor that the doctor begrudges his time and labor, but to the far larger class who are able to pay something and yet in fact pay nothing. Any plan which enables the profession to gather up, without too much loss in time and labor, the "mony mickles" which "mak a muckle," is worthy of careful attention and thought, even though it does seem at first repugnant to our sense of professional dignity.

It is, therefore, with considerable interest that we have watched the discussion concerning a new plan of practice which is being developed in London, seemingly as an outgrowth of, or a suggestion from, the much-abused dispensary services. The physician simply keeps a private dispensary, charging a very small fee, but exacting it always in advance, and furnishing medicine without further charge. One correspondent of the London *Lancet*, who claims to have been highly successful in a pecuniary way, achieving a weekly income nearly equivalent to one hundred dollars of our currency, charges only one shilling for seven days' attendance at the dispensary, and congratulates himself that he is not as other men,—has no night-work, no weary watching at the birth-bed, no worry

over books and bad debts; his health is better, his leisure far more abundant, and his income more than three times what it was before he adopted "the dispensary system." In the face of such *argumentum ad hominem*, arguments concerning the propriety or impropriety of the procedure are wasted.

It does seem to us that the charges are too small to cover the expense of the medicines, and the temptation always too great to sacrifice the patient to cheap drugs. The general sentiment of the profession, in this city at least, is also strongly against physicians furnishing drugs at all; but it appears to us very certain that no amount of discussion, or even of legislation, will affect that worse evil, prescribing over druggists' counters, until some arrangement is made by which the poor can get, for the fifty cents which the druggists charge for the medicine, both medical skill and medicine. If provision for this were made, the druggist would no longer be the chief practitioner in poor localities. Until it is done, the law of necessity on the one hand and the desire of profit on the other will link together the sick poor and the corner pharmacien.

THE New York *Medical Record* proposes the following plan for State examinations:

"*Examination of candidates for the degree of Doctor of Medicine; fees.*—All candidates for the degree of M.D. to be examined by a State Board of Examiners. Previous to the examination they are to pay a fee of twenty dollars, and to furnish the examiners with satisfactory testimonials regarding age, course of studies pursued, etc., etc. The actual conferring of degrees to be done by the colleges in the usual manner, the wording of the degree simply being changed to conform to the new régime.

"*Places and times for examination.*—Examinations to take place during February in New York, Albany, Syracuse, and Buffalo; during September in New York and Syracuse.

"*Number of examiners needed.*—There

should be seven examiners, one for each of the following departments of medicine:

"1. Anatomy. 2. Physiology. 3. Chemistry and Materia Medica; Hygiene. 4. Pathology and Practical Medicine. 5. Surgery. 6. Obstetrics and Gynæcology; Diseases of Children. 7. Pathological Anatomy.

"*Remuneration of the examiners.*—The examiners should be paid not less than twenty-five dollars a day during actual service. The mode of management of the fund accruing from candidates' fees to be determined by the State Medical Society. Whether the service should last for several years, or only for one year, will also have to be determined by the State Society.

"*How shall the examiners be appointed?*—The examiners should be appointed in part by the colleges themselves, and in part by the State Medical Society. This can be effected through a committee of appointment, to consist of fifteen or sixteen men,—one from each of the seven medical colleges, and the remaining eight or nine chosen by the State Society. This committee to meet during the session of the State Society, and to select seven men (and seven substitutes), who shall constitute the State Board of Examiners for the degree of Doctor of Medicine."

The chief difficulty with this plan consists in its not providing any door of admittance for homœopathic, eclectic, and other irregular practitioners whom the law recognizes. We do not believe that the fact that the colleges are admitted to representation will, as the editor of the *Record* appears to think, disarm their opposition. The colleges are kept alive by keeping their doors so wide open that crowds can enter, and anything that will make admission more difficult will meet their sternest opposition. We cannot have proper medical education until the profession or the people rise upon and overwhelm the teaching interest at present existing.

We print in another column a letter proposing still another plan for opening the subject. If the American Medical Association could take some decisive steps, it would confer a great blessing upon these United States.

If there be one thing more than another to which the words of Hamlet, "How stale, flat, and unprofitable," are applicable, it is the average medical introductory. It is, therefore, with a double zest that we have read the address of Dr. S. D. Gross,* as delivered on the 4th of October last. It is an exhaustive and impartial, though perhaps somewhat glowing, review of American medical literature, and we commend it most heartily to all interested in the progress of medical art and science on this continent.

CORRESPONDENCE.

NEW YORK, November 17, 1875.

TO THE EDITOR OF THE PHILA. MEDICAL TIMES:

DEAR SIR,—The Friday evening reunions of the New York Medical Journal Association are now held regularly at the hall of the Academy of Medicine, and its reading-rooms and library have also been transferred to that building.

At the last meeting of the Association, Prof. Abram Jacobi made some interesting remarks on a certain class of nervous disorders of childhood, during the course of which he stated that reflex paralysis and other phenomena denoting derangement of the nervous system had been noticed as dependent on irritation of the genital organs, by a number of European and some few American writers, long prior to the date when the attention of the profession was more specially and prominently called to it by the papers of Dr. Sayre and others on the subject. He referred particularly to a work published in 1870, by Simoyen, a French writer, on neuralgias having their origin in orchio-epididymitis, in which he mentions several cases of this species of paralysis.

Dr. Jacobi then went on to make some criticisms on the report of a case of "Partial Paralysis dependent on Adherent Prepuce," by Dr. Hunt, in the *New York Medical Record* for October 16; principally to the effect that the early history of the child, who was six years old, was not given, and that the writer did not mention whether it was addicted to the habit of masturbation or not. In many of these cases he regards the paralysis as not reflex at all, but due in fact to inflammatory action, a positive neuritis which may spread to the spinal cord and result in myelitis. Nearly all the others, he thinks, are really due to the effects of masturbation; which, there

* History of American Medical Literature. Pamphlet, 85 pp. P. Madeira. Philada., 1875.

is every reason to believe, is vastly more common among the young of both sexes, and even in very young children, from one year up, than is generally supposed. The general effects of the pernicious habit are not materially different from those observed in the adult. One of its frequent results is a marked enlargement of the sebaceous follicles; and when this is noticed, our suspicions should always be aroused, though, of course, the hypertrophy may be due to some other cause.

We are to look for the cause of masturbation in some irritation, whether external or internal. Among the ways in which it may originate are the following:

Nurses often find it an easy way of keeping young children quiet to handle their genitals.

Putting pantaloons on little boys too early. The parts are thus compressed, and kept too warm. The difficulty of performing the act of micturition is also thus greatly enhanced. You will sometimes see quite a party of little girls trying to assist their playmate of the opposite sex in getting his penis ready for action, and then button his trousers up again afterwards; and thus the boy learns to play frequently with the organ.

The irritation of horseback-riding. Dr. Jacobi has noticed the habit contracted in this way in a number of boys who had ponies of their own.

Sleeping on feather-beds, or with too much covering.

The irritation produced in the rectum or vagina by the *oxyuris vermicularis*, or even by the presence of hardened masses of feces in the rectum.

All irritations of the genito-urinary tract, such as catarrh of the bladder, stone, gravel, etc. Affections of the kidney are more common than is generally supposed. Out of forty post-mortems of children, Dr. Jacobi found renal calculi in no less than six. Some kinds of food, probably, and certainly some of the medicines commonly used, have an injurious effect on the kidneys. Among the latter may be mentioned such salines as the nitrate of potassium, and, notably, the chlorates of potassium and sodium. These produce marked congestion of both the stomach and kidneys, and, in large doses, have not infrequently proved fatal. The first case of this kind reported was that of Dr. Fontaine, of Davenport, Iowa, fifteen or twenty years ago, who, in experimenting with the chlorate of potassium on his own person, took an ounce and a half in a day. This produced acute diffused nephritis, and he died of uræmia on the fourth day. Dr. Jacobi, and the late Dr. Krackowizer, also each lost a patient in the same way from chlorate of sodium. One took an ounce, and the other an ounce and a half, in a single afternoon, instead of putting it in a quart of water and using occasionally,—in part as a gargle.

Dr. Jacobi prefers the sodic chlorate, on account of its greater palatableness and solubility.

The very free use of the chlorate of potassium at the present day, no doubt, accounts for some of the cases of albuminuria we meet with.

In the treatment of masturbation, great care must be observed in watching and controlling the child. Some one should sit with it until it goes to sleep at night, and it should be taken up as soon as it wakes in the morning. Then all possible sources of irritation should be removed. Adherent prepuce is not always abnormal; for it is the natural condition during foetal life, and sometimes remains afterwards. But if it is only partially adherent, and pouches are formed, in which the smegma accumulates, or urine becomes acid and ferments, circumcision should by all means be performed.

Of medicines, bromide of potassium (though Anstie did not think it useful except in cases of extreme mental and physical activity) has at least the good effect of producing calm sleep throughout the night, when the child might otherwise indulge in self-abuse during intervals of wakefulness. Lupulin and camphor are also useful, and such tonics as iron and strychnia are generally called for in addition.

Among the general symptoms sometimes resulting from masturbation may be mentioned (in addition to paralysis) epilepsy, chorea, and hypochondria. The latter, occurring in children, is to be regarded as invariably due to this cause. Some of the local manifestations are hysterical cough (loud, interrupted, and breaking in character), hemiplegia (best treated by belladonna, iron, and nitrite of amyl when accompanied by local anæmia, as is usually the case), and neuralgia of the joints. The latter, first noted by Brodie, and afterwards described by Stromeier and Esmarch, is now recognized by all. The parts more usually affected are the inner condyle of the femur at the knee-joint, the styloid process of the ulna, and the vertebral column. Spinal irritation was believed by Meyer to be due to congestion; while Hammond thinks there is anæmia, and, therefore, that strychnia is the true remedy for it. But often the same phenomena are seen in hyperæmia and anæmia of nervous centres, and the strychnia is indicated not so much because it dilates the blood-vessels, as because it is a direct stimulus to the nervous system, especially the medulla oblongata. Dr. Jacobi concluded his remarks with some account of hysterical paralysis induced by masturbation, and gave the history of a very interesting case of his own, the patient being a girl of nine years, who had been addicted to the habit for years.

At one of his recent clinics at the College of Physicians and Surgeons, Dr. Jacobi presented

a very marked case of prolapsus ani in a child of three years. The bowel remained protuberant for a whole year after it first came down, the parents being unable to replace it. It was finally restored, however, and remained up for some time. A few weeks ago it came down again, and has remained out ever since; now presenting the appearance of a bright-red tumor, of the size of a large tomato. The mucous membrane was much swollen and congested, its follicles being greatly enlarged and some of them ulcerated. Dr. Jacobi mentioned that sometimes in these cases a reduction of the prolapsus is rendered impossible by inflammatory adhesions. He explained that prolapsus is due to the hypertrophied and swollen condition of the mucous membrane, and that it almost never occurs except as a result of diarrhoea. It is a very frequent sequela of diarrhoea, and we should therefore understand the necessity of always stopping diarrhoea *at once*, notwithstanding the impression to the contrary so generally prevalent in the public mind, and even among some physicians. Diarrhoea is never *physiological*. Ether was then administered, and the prolapsed rectum restored by gentle taxis. The sphincter was so flabby, and so much enlarged, however, that the gut was liable to come out again at any moment, and its continual replacement would constitute an important part of the treatment. At the same time it should be occasionally cauterized by nitrate of silver before putting it back. The daily treatment would consist in the frequent application of ice, and also of an ointment composed of one drachm of alum to six drachms of lard, with two fluidrachms of glycerin and thirty grains of the alcoholic extract of nuxvomica. Tannin, or other vegetable astringent, might be substituted for the alum, if preferred. Dr. Jacobi did not refer to the local use of ergot, which has of late been employed with so much success in this affection.

At the last meeting of the Journal Association in its old quarters, Dr. B. F. Dawson exhibited a new galvanic cautery battery, devised by himself. Before describing it, he spoke of some of the objections to the batteries now in use, mentioning particularly their unwieldy bulk, and the difficulty of keeping up the connection continuously when using them. Zinc and carbon are the materials generally used for plates, but the carbon readily "fouls," or becomes plugged with effete material, the sesqui-oxide of chromium. Then bulbs of fine hydrogen collect on the plates and interfere with their action. In order to prevent polarization of the cells, a number of devices have been resorted to. In the best galvanic cautery battery now in use, that of Dr. Byrne, of Brooklyn, the introduction of air, to agitate the fluid and bring new portions of it in contact with the plates, has achieved some measure of success; but even this is not always

effectual. Dr. Thomas has recently been compelled to postpone an important operation on two successive occasions, in consequence of the failure of such a battery to work.

It has, therefore, been Dr. Dawson's aim to get up a battery which would successfully overcome this difficulty, be of small compass, and always to be relied upon. In his experiments he has found platinum much more efficient than carbon, as well as much more durable,—one plate of platinum outlasting several of carbon. Of course, it is very much more expensive; but where a battery is of the minimum number of elements, this is not a matter of so much importance. The battery he has finally constructed combines smallness of bulk, he claims, with great power and complete reliability. The external wooden box is eight inches high, five and a half inches long, and three and a half inches wide, and he believes the battery to be decidedly the most powerful of its size that has yet been devised. There are two glass cups, into each of which are introduced two zinc plates, with one of platinum between them. Dr. Dawson at first tried platinizing other substances, but found that when such a thin coating of platinum was used, too much heat was generated in the fluid, which is the ordinary solution of bichromate of potassium in sulphuric acid and water. The distinctive characteristic of this battery consists in two hard-rubber agitators, or pumps, as Dr. Dawson calls them, in the shape of the letter T inverted, which pass down between the plates, and can be raised and lowered as often as desired, by means of a handle. In order to facilitate their action, the zinc plates are perforated by a number of small holes, through which the fluid continually passes, as it is displaced by the pumps. There is no splashing, and the working of the pumps is exceedingly simple. The cups hold just one quart of fluid together, and Dr. Dawson thinks this quantity is sufficient to keep the battery in constant action for half an hour without being charged. As the fluid is so inexpensive, it is better never to use the same portion over again. After the cups have been filled, if it is desired to suspend the action of the battery temporarily, an arrangement has been made for supporting the plates entirely out of the liquid by means of brass rods which can be fastened into each end of the wooden box.

After thus explaining its construction, Dr. Dawson proceeded to give an exhibition of its powers. He began by heating platinum wires and small platinum knives for surgical operations. When the pumps were not used, the metal was simply heated to a dull redness; but the instant they were worked, to however slight an extent, it was brought to a white heat dazzling in its brightness. Indeed, if the pumps were moved with frequency there would be great danger of the platinum being fused; and this actually occurred in one of

the knives heated. Afterwards knives of larger size were tried, and some of these could not be appreciably heated at all, while others could scarcely be heated to redness, without the working of the pumps. Yet, immediately the latter were used, they, too, were brought up to a dazzling white heat. One heavy knife, which Dr. Noeggerath, who has probably had a larger experience with the galvano-cautery than any other man in this country, was entirely unable to heat at all by any battery that he had ever used, instantly became white hot in the same way also. These new batteries are now being made by Tieman & Co., and their probable cost will be forty or fifty dollars. Yet, notwithstanding the platinum used in their construction, this is only about one-half that of Byrne's battery. The actual cost of the platinum in each plate is eight dollars. Dawson's battery has already been used in a number of operations by Thomas, Sims, Noeggerath, and others, and always, as yet, with entirely satisfactory results.

We must confess that we cannot quite understand how the working of these little pumps should make such a wonderful difference in the power of the battery. That their efficiency is not due either to the agitation of the fluid or the cleansing of the plates, seems to us to be distinctly shown by the fact that, even when the perfectly clean plates are first put into perfectly fresh fluid, the instrument has had a very feeble power until the working of the pumps is commenced. We are forced to conclude, therefore, that there must be some mysterious principle involved, which remains as yet unexplained.

The physiology and pathology of the sympathetic nervous system are subjects upon which it is devoutly to be wished that we had a little more definite knowledge. At the last meeting of the Neurological Society, Dr. T. Edwards Clark read some "notes" on the latter, but, as far as we could make out, did not succeed in throwing very much light on the almost Cimmerian darkness with which it is involved. In the first part of the paper he gave a synopsis of four cases of supposed affection of the cervical sympathetic, either from injury or disease, reported by Drs. Ogle, Weir Mitchell, Paine, and Séguin. There was a painful lack of uniformity of symptoms in all these cases; and, indeed, in only one of them (Dr. Séguin's) was the lesion of the sympathetic actually demonstrated. This case was one of cancer. The speaker then went on to show that the sympathetic is so intimately associated with the cerebro-spinal axis that it is difficult to appreciate the distinctive manifestations of disease in the former, and that much that has been asserted in regard to its pathology, when thoroughly sifted, is found to be pure conjecture.

He spoke in detail of several affections which have been supposed to originate in

disease of the sympathetic, or in which the sympathetic was believed to be more or less implicated, and then mentioned the number of authorities and the amount of proof that had been brought forward to render such a position untenable. Among these were exophthalmic goitre, which Trousseau maintained was essentially an affection of the sympathetic, Addison's disease, hemiplegia, and progressive muscular atrophy.

At one of the recent meetings of the Academy of Medicine, Dr. H. G. Piffard read a carefully-prepared paper on "The Rheumatic Diathesis in Dermatology." Under this diathesis he classed such skin-affections as eczema, impetigo, and pityriasis, and he employed the term "rheumatic" because it implied an exudation, because these affections appear to be associated in some manner with rheumatism and gout, and because they are all vulgarly known under the name of *salt rheum*.

At the last meeting of the Academy, Dr. Jacobi read an extended biographical sketch of the late Dr. Krackowizer. The esteem in which that distinguished surgeon and philanthropist was held by the general community, and particularly his German fellow-citizens, who form so prominent an element in the population of New York, was well shown in the recent memorial services at Steinway Hall, when that large building was crowded by those anxious to do honor to his memory.

On the platform sat Dr. Rohlf, the African traveller, General Sigel, Ex-Governor Solomon, Mr. Joseph Seligman, and other prominent gentlemen. Appropriate musical selections were rendered by an orchestra and the two great German choral societies, the Liederkranz and the Arion; and addresses were made in German and English by Hon. Carl Schurz, Dr. Althof, and Mr. E. J. Hall.

One of the events of the past month has been the meeting of the American Academy of Dental Surgery at the College of Physicians and Surgeons in this city, though the attendance, we believe, was not so large as had been anticipated. An address on behalf of the medical profession was delivered by Dr. Hammond, the subject of which was, "The Relations of Dental Science to Medicine;" and among the papers read by members of the Academy were the following: "Reflex Nervous Disorders from Dental Irritation," by Alfred L. Carroll; "Etiology of Dental Caries," by Prof. J. B. Willmott, of Toronto; "Mechanical Dentistry," by C. S. Hurlburt; "Physics and Physiology," by W. S. Elliott; and "The Necessity of Dentists in the Army and Navy," by A. P. Merrill. The latter was discussed at some length, and letters were read from Surgeon-General Barnes and other medical men, and from General W. T. Sherman, advocating the introduction of a dental department, subject, however, to the supervision of the present medical branch of the service.

At a special session at the house of the President of the Academy, Mr. George H. Perine, a galvano-cautery apparatus was exhibited, and recommended in operations upon the gum, removal of tumors, destruction of nerves without pain, etc.

Smallpox has been quite prevalent in Brooklyn of late, and there seems to be considerable alarm among the citizens in consequence. As many as seven cases at once were discovered on a single floor in a tenement-house in the Sixteenth Ward, and the average number of cases reported is from twenty-five to thirty per diem.

In the first week of November there were one hundred and thirty cases, and no less than thirty-seven deaths. At a recent meeting of the Board of Health, resolutions offered by Dr. Ottarson, enforcing the closing of all stores and other places of business in buildings where the disease was raging, and compelling the occupants of each infected house to hang out a yellow flag, were adopted. Twelve extra vaccinators have been appointed, and the work of vaccinating the children of the public schools has now been going on for some time.

At the meeting of the New York Board of Health yesterday, a lengthy report on the vaccination of school-children was handed in by the Chief Inspector of the Vaccinating Corps which was organized one year ago. From this we learn that great difficulty has been experienced in their work. From the outset they have endeavored to induce children to be vaccinated without compulsion, hoping to be able to vaccinate all who required it. Hitherto, however, they have succeeded in doing so in only from ten to fifteen per cent. of children really needing it, on account of the opposition of parents. "Strange as it may seem," says the report, "we find instances nearly every day where the parents of school-children living in infected houses, and even when smallpox is in their own families, persist in sending them to school, if they be allowed, and yet will not consent to their being vaccinated under any circumstances." In some cases this is due to deep-seated prejudice, and in others to culpable carelessness and indifference. Mild cases of smallpox, and even serious ones, are frequently concealed from the authorities; and out of 158 fatal cases during the past year, no less than 60 were dead when discovered. In conclusion, the Board of Education were urged to make it compulsory upon all unvaccinated children attending the public schools to submit to vaccination either by the members of the Board of Health Vaccinating Corps, or some private physician.

PERTINAX.

PAUL LORAIN, Professor of the History of Medicine in the Faculty of Paris, died suddenly upon the 24th of October last.

TO THE EDITOR OF THE PHILA. MEDICAL TIMES:

SIR,—Permit me to make a few suggestions on the subject of State examining boards, based upon the action of the Medico-Chirurgical Society of Philadelphia in 1870.

As a representative body, the American Medical Association might appoint a committee to confer with four or more prominent lawyers,—leading members of our medico-legal societies,—with power to draft a bill for the formation of State examining boards. Said bill should be submitted to the highest medical corporate body of each State, and, after it had been thoroughly canvassed by it and by the county medical societies, it should be returned with suggestions or recommendations to the original committee, who should finally decide upon a bill. Then, if a simultaneous movement were made upon the legislature of each State, such united action would probably meet with success.

In order to prevent political or other interest, favoritism, unfairness, etc., the State examiners should be chosen and appointed by the Supreme Court and the College of Physicians (or the highest medical body) of each State. The appointees should be men of the greatest medical and surgical reputation, in no wise connected with the medical colleges or schools; and they should be sworn to a true and faithful exercise of their responsible duties.

An *auxiliary* board should be appointed, consisting of one examiner on practice, and one on *materia medica*, for each irregular school chartered by the State, and one lawyer who should be the secretary and legal adviser of the board, and the examiner on medical jurisprudence. This auxiliary board (always excepting the secretary, who should be present at all examinations) need not sit with the regular board (if objectionable), but the right of members of both boards to be *present* at the examination of a candidate should be provided for by law.

Every candidate should have been a student for not less than three years of a chartered medical school in good standing, and should be required to exhibit his certificate of attendance and of examinations, and to pass an academical and professional examination before the board. The students of regular schools should pass the regular board only, and the students of other systems of medicine, after passing an examination on the practice and *materia medica* of their respective schools before the examiner specially provided for them, and exhibiting evidence of the same, should then be required to pass the academic and the professional examination on all other branches before the regular board.

The examination should be recorded and registered, and gazetted and published in the principal daily papers. The diplomas should be granted by the colleges as at present, upon a *mandamus* issued by the board, and should be signed by the president and secretary

thereof. Authority should be conferred upon the latter to cite before it any graduate for criminal or improper action, and, after trial and conviction, to revoke his diploma, and to publish the same. This plan would not interfere with the usual examinations of the schools,—indeed, certificates of such should be required,—nor with their right to confer degrees, *after receiving a mandamus from the board*. It would effectually protect the public against ignorant practitioners of any school, save thousands of lives annually, and be fair to all systems of medicine. As it is not to be expected that medical men of experience and reputation would accept office without adequate remuneration, the sum of \$5000 per annum should be provided for each examiner, as follows: The present graduation fee of \$30 should be paid by every matriculant into the State treasury (to be returned if the candidate fails to pass), and, as the sum thus collected may be insufficient, the deficit should be supplied by the State, in return for the inestimable benefit which would be conferred upon the public by the State Medical Board.

ENROBELO.

Nov. 7, 1875.

REVIEWS AND BOOK NOTICES.

VISION—ITS OPTICAL DEFECTS. By C. S. FENNER, M.D., Louisville, Kentucky. Philadelphia, Lindsay & Blakiston, 1875.

In this book Dr. Fenner has presented the profession a very readable treatise, and one which we predict will be well received by the general professional reader. Its only rival in American ophthalmic literature is the kindred treatise of S. Wells ("Long, Short, and Weak Sight"). The author evidently has not intended that his book should take the place of the more elaborate and severe work of Donders.

Dr. F. has prefaced his volume by two long chapters, Parts I. and II., on Physical and Physiological Optics, in which he has set forth in a very satisfactory manner many things interesting and curious to the general reader, and much that is necessary to be known in order to study successfully the subsequent portions of the book. In the works of Donders and Wells it is taken for granted that professional readers are familiar with these rudimentary lessons on optics. That this is unfair to a large number of readers is undoubtedly true, and our author, realizing this, has done well to introduce these chapters. It may be urged, however, that an unduly large portion of the book is devoted to these preliminary studies,—one hundred and sixty-seven pages being taken up by them, while the defects of accommodation and refraction are disposed of in one hundred and twenty-two pages. This disproportion might have been partially obviated by omitting from Parts

I. and II. the paragraphs upon Fluorescence, Phosphorescence, Spectrum Analysis, Interference of Light, Polarization, the Pseudoscope, Aerial Perspective, Illusions, etc., since their bearing upon the subject of which the book professedly treats is so remote as to make them appear out of place in a work not professing to be exhaustive.

Part III. is devoted to the real purpose of the book, "The Errors of Refraction and Defects of Accommodation." The many difficult problems which present themselves under hypermetropia, myopia, and astigmatism are treated clearly, carefully, and succinctly: indeed, we know of no work where the student or general practitioner can more readily gain a correct understanding of this important class of eye-affections.

There is nothing essentially new in Dr. Fenner's book, but he is the first systematic writer to incorporate the methods of correcting astigmatism recently devised by various American oculists.

Scattered through the work are a few errors in calculation of formulæ; and on pages 255 and 257 the arrangement of figures without explanation is such that the general reader would be led to attribute the concentric circles of Otto Becker to Dr. Green. In spite of these errors, and others more evidently typographical, the book is very readable, and, on the whole, accurate. The publishers have done their work so commendably that we are somewhat disposed to excuse the forty pages of advertisements bound with the book,—a practice which we cannot but regard as in every way objectionable.

CLINICAL LECTURES AND ESSAYS. By SIR JAMES PAGET. Edited by HOWARD MARSH, F.R.C.S. New York, D. Appleton & Co., 1875.

Anything which Sir James Paget writes or publishes at the present day is sure to command from the medical profession the attention and respect which it is equally sure to deserve. The present volume is an admirable illustration of the clearness and originality of thought, the clinical sagacity, and noticeably, also, the professional caution, which have caused its author to be recognized as one of the most reliable and trustworthy of medical writers and teachers. The greater part of the contents of the book had already appeared in various medical journals, hospital reports, or in the transactions of societies, but they are in every way worthy of having been brought together and arranged in a more permanent and durable form. The essays are all essentially practical in their character, and of great importance to every physician or surgeon who cares to supplement his own experience by the careful and thoughtful observations of one of the most extensive practitioners in the world. They are characterized by a quiet self-reliance, and a thorough con-

servatism in all that pertains to the treatment or management of cases, with, at the same time, an entire independence of thought and a total disregard for popular prejudices and beliefs, when these latter are without a good and sufficient foundation. The essays on Nervous Mimicry and on Sexual Hypochondriasis are excellent examples of this evident quality of the author's mind; but the book abounds with others almost equally striking. There are few practising surgeons who would not be both interested and enlightened by a perusal of the articles on "The Various Risks of Operations" and "The Calamities of Surgery," which should be placed especially in the hands of those who are inclined to be too fond of operative interference. Mr. Marsh's complementary and explanatory notes add to the value of this collection of essays, and aid in making the book what it undoubtedly is,—one of the most valuable of recent additions to medical literature.

A MANUAL OF MINOR SURGERY AND BANDAGING. By CHRISTOPHER HEATH, F.R.C.S. Fifth Edition. Philadelphia, Lindsay & Blakiston.

This little book, which is addressed to young surgeons who are residents or dressers at the hospitals, will be found of use to many of more mature years and larger experience. The directions for performing the minor operations are extremely clear and succinct, and the book abounds with practical hints as to the best methods of overcoming the various trifling but annoying difficulties which result from inexperience. The treatment of emergencies also receives a tolerably full consideration. The chapter devoted to cases of poisoning is rather unnecessarily brief, and might, perhaps, have been advantageously extended at the expense of that on the general conduct of the house-surgeon. The section on bandaging is neither so full nor so clear as might be desired; but altogether the book is admirably adapted to fulfil the purpose for which it was written, and may be profitably consulted by all who feel that they lack experience in the details of minor surgery.

GLEANINGS FROM EXCHANGES.

PREGNANCY IN EPILEPTIC WOMEN (*American Journal of Obstetrics*, August, 1875).—Dr. Parry believes that experience and the study of the literature of the subject justify the following statements. 1. Epileptics rarely have convulsions during labor. They are not more liable to puerperal convulsions than healthy women. Labor in them is, as a rule, not more unfavorable than in healthy women. 2. In the exceptional cases in which violent epileptic convulsions occur during labor, it is not decided whether it is best to hasten de-

livery or to trust to nature. 3. Pregnancy may be the immediate cause of epilepsy. In these cases fits rarely occur during labor, and the disease is immediately arrested by parturition, but it will almost always reappear whenever the woman becomes pregnant. 4. Either form of epilepsy may result in the death of the fœtus; but convulsions of this kind are not so likely to destroy the child as are those which may be correctly designated puerperal.

TWO CASES OF PUNCTURED FRACTURE OF THE FRONTAL BONE TREATED BY TREPHINING (*The British Medical Journal*, August 28, 1875).—Dr. Kelburne King reports two cases of fracture of the frontal bone. In the first case, the accident arose from the kick of a horse in the left side of the forehead. A punctured fracture of the bone was the result. For some time no serious symptoms arose. But, a month after the accident, Dr. King trephined the bone, on account of head-symptoms, and removed three portions of the internal plate of the skull which projected through the membranes into the substance of the brain. Abscess and hernia cerebri followed; but eventually the patient recovered, with, however, loss of vision from atrophy of both optic nerves.

The second case was that of a sailor, who fell into the hold of a ship, and received, among other injuries, a punctured fracture of the left side of the forehead. Three weeks after the accident Dr. King trephined the patient. Notwithstanding this, a most serious train of symptoms set in, including paralysis of the limbs, except the left arm; hyperæsthesia of the legs, blindness, deafness, loss of speech, and delirium. The patient eventually recovered, with blindness of the right eye, caused by atrophy of the optic nerve.

CASE OF PARTIAL RUPTURE OF THE POPLITEAL ARTERY AND COMPLETE RUPTURE OF THE POPLITEAL VEIN—PRIMARY AMPUTATION OF THE THIGH (*The British Medical Journal*, August 28, 1875).—Mr. W. Rivington reports the case of a young man, aged 19, who was riding on the front seat of an omnibus, when a runaway horse and cart dashed at the omnibus, and a corner of the cover of the cart struck him on the left knee, driving it forcibly backwards. There was much contusion of the knee, but no signs of fracture or dislocation. The swelling of the part increased, and the patient complained of loss of sensation in the leg; the temperature of the limb also fell. Pulsation could be barely felt in the posterior tibial artery. On auscultation, a low clicking sound was heard in the course of the popliteal artery; and the diagnosis formed was probable rupture of the artery. Amputation was performed by a modification of Teale's operation. The patient ultimately did well. On examination, there was found to be extensive effusion of blood in the areolar tissue of the limb. The posterior ligament

of the knee-joint was slightly torn; and the plantaris muscle was torn from its attachment to the femur. The popliteal vein was completely severed; and the inner and middle coats of the artery were separated from the external. The ligamentous and cartilaginous structures of the joint were injured; and the external condyle of the femur was nearly separated by a fissure, while a small triangular piece of bone lay loose and projected into the joint. The upper part of the tibia was also fissured.

CLOTH TENTS (*Chicago Medical Journal and Examiner*, October, 1875).—Dr. C. Henri Leonard has used very extensively in his gynæcological practice a tent made of cloth, for the preparation of which he gives the following directions. Take a strip of linen six inches in length and three-quarters of an inch in width, a piece of hair wire four inches long, and a few inches of common thread. Roll one corner of the linen strip lightly between the thumb and finger, then unroll and place the centre of the wire at the corner so rolled, and then roll the cloth at this corner over it (spirally, just as you would go to work to make a paper lamplighter), till you get almost to the other corner of the same end, then bend the wire upon itself (double it, in other words), so that the two extremities will point to the unwound portion of the linen; this done, continue rolling the linen, in a spiral manner, about the doubled wire till it is exhausted, then tie with the thread the last spiral turn about the wire. You now have a tent about two and a half inches in length, and one sufficiently firm to enter any normal uterine canal, and nearly all abnormal ones. You can bend it to any curve to facilitate its introduction.

As it is inexpandible, it may be left *in situ* for twenty-four hours or more, and it is thus possible to get the prolonged action of a medicament upon the lining membrane of the uterus. It is equally applicable in the treatment of any other sinus-like canal, whether from wounds or otherwise.

AFFECTIONS OF THE TONGUE WHICH RESEMBLE THOSE OF TERTIARY SYPHILIS (*Medical Record*, October 23, 1875).—In a recent lecture Prof. Fournier points out the diseases of the tongue which may be confounded with the later syphilitic diseases of that organ. First, glossitis due to the constant friction of the tongue against the sharp or broken edge of a tooth. Second, glossitis due to prolonged use of tobacco. Third, tubercular glossitis is associated with a phthisical history and symptoms identical with those of laryngeal phthisis. There are ulcerations, especially of the tongue, closely resembling the syphilitic. The differentiation is to be made from a careful physical examination of the patient, and from the fact of the rebellious nature of these lesions, while those which are syphilitic yield readily to specific

treatment. Fourth, the most important differentiation to make is that from cancrroid of the tongue, especially when the stage of ulceration has been reached. Cancroid, he believes, is sometimes hereditary, and is more likely to be observed late in life, especially between fifty and sixty, while the syphilitic lesions are seen at an earlier age. The following points are important. Cancroid is a tumor with an ulcerated surface, it is true, but with a well-defined indurated base, much more marked than in the gummata, which are purely ulcers without tumor. Cancer, again, is unilateral,—called *azygos* by Ricord. Its ulcer is more fungous, more ready to bleed, less gray, has less of a core, is less sharply cut, has more granulations. It has a more fetid, ichorous discharge, and is more painful. Again, an excellent diagnostic sign, when present, is the occurrence of ganglionic engorgement in the later stage of the cancrroid, while it is absent in the gummata. Finally, the therapeutic proof may settle the question of syphilis or not, when other tests have left us still in doubt.

MILK-DIET (*The British Medical Journal*, September 25, 1875).—Milk-diet, as a means of treatment in dropsical disease, is specially advocated by Dr. Serre d'Alais (*Journal de Connaissances Médicales*). He associates it with a diet of onions, raw or cooked. He prescribes three *soupes au lait* every day, onions, and a dry diet. He lays down, as his method of treatment, first to relieve the urinary gland by abstinence from drinks generally; to excite it gently with onion; to nourish the body with milk, its primitive nutriment, without irritating it. M. Desnos, at the Pitié, employs milk a good deal when it is desirable to provoke diuresis, and that in very different cases. But he is not a partisan of the exclusively milk diet, which is often not well tolerated, and is not sufficiently nourishing. The patient eats meat, drinks wine, but adds to his diet two pints of milk every day. The milk is drunk cold, and salted with two grammes of kitchen-salt to the pint. M. Desnos recommends milk especially in acute catarrhal nephritis. In chronic nephritis it is only palliative. In dropsies complicating the diseases of the heart, M. Desnos employs also milk, which provokes abundant diuresis, and unloads the vascular system; but if, after two or three days, diuresis be not established, he stops the milk-treatment, for then the circulatory system would become loaded rather than relieved. Milk is advantageous also in simple pleurisy; but there must be an absence of fever, and the milk must only be employed when we wish to avoid puncture. It is especially employed when the effusion has resisted blistering and natural diuretics. It has also succeeded sometimes in chronic pleurisy.

CONTRACTED PUPIL IN HEART-DISEASE (*The British Medical Journal*, September

25, 1875).—Professor Giovanni (*Annali Universali di Medicina*) has studied with care three cases of advanced organic heart-disease accompanied with bilateral myosis, from which he draws some interesting conclusions. All three were accompanied by severe dyspnœa, continuous or recurrent. One was a case of mitral narrowing and insufficiency; the second, a case of aortic narrowing, with valvular insufficiency; the third, aortic narrowing, with mitral insufficiency. In all three, there was constant bilateral myosis; in two, this symptom was more marked when the dyspnœa was more urgent.

In order to determine the clinical value of myosis of cardiac origin, its origin and mechanism must be studied. It is a paralytic myosis. It may arise from three sorts of lesion: 1, lesions of the cervical cord; 2, lesions of the superior cervical ganglia; 3, lesions of the terminal filaments of the sympathetic which go to the radial fibres of the iris.

On examining with the microscope the sympathetic and many sections of the cervical spinal cord of these patients, he found great hyperæmia of the ganglia of the sympathetic, with more or less intense infiltration of the lymphoid elements. The cord and the nerves of the iris were not affected. These lesions are the consequence of the stasis of the blood produced by the state of the heart.

They exist, probably, in all patients of this class, but are not always manifest. The disorders which have their source in the sympathetic are comparable to those which proceed from the encephalon or from the spinal marrow. In certain patients with cardiac disease, cerebral excitement is found; in others, somnolence. Myosis has a very distinct significance; it does not only indicate stasis of the blood, but a profound lesion of the ganglionic cells, thenceforth paralyzed. The ganglionic lesion affects equally the heart and the lung, to the innervation of which the ganglionic cells contribute. The cardiac activity and pulmonary circulation are therefore more seriously affected than in other cases, when myosis exists. The author draws from these facts the following conclusion from the point of view of prognosis. Myosis in affections of the heart is a symptom of very grave prognostic value. It announces the presence of a lesion of the ganglia of the sympathetic, which tells upon the heart itself and the lungs.

CARDIAC INTERMISSION (*The Doctor*, October 1, 1875).—An important contribution to the history of this symptom has been made by Dr. L. Lereboullet (*Gazette Hebdomadaire*).

1. The best-characterized cardiac intermissions, the most painful to the patient, those accompanied with symptoms which indicate that many organs which derive their innervation from the pneumogastrics are affected simultaneously with the heart, are frequently met with when there does not exist any

organic lesion of the central organ of the circulation.

2. Cardiac intermittences which depend upon a primary or secondary alteration of the myocardium are most frequently indolent. They are almost always accompanied with acceleration of the pulse. They follow arhythmic derangements termed inequalities or irregularities. They are almost always preceded by *faux pas* of the heart.

3. We may, nevertheless, in certain cases, as at the commencement of an endocarditis, or when the organic disease of the heart is not yet revealed by any stethoscopic sign manifesting itself, subsequently observe cessation of the heart-beats, which proves that the cardiac plexus at the commencement of organic lesion is much more impressible than in its physiological state.

4. The symptom of *intermittence*, then, in itself, and as a means of diagnosis of diseases of the heart, has but small significance, especially if the intermittences are isolated, transitory, and if they may be referred to one of the causes previously enumerated. This symptom acquires a real value only when the intermittences occur with frequency, and are joined to symptoms which may lead to a suspicion of lesion of the mitral valve.

5. Cardiac intermittence may accompany the most varied pathological conditions. It is not necessarily indicative of general or serious derangement of health.

MISCELLANY.

PANCREATIC ENEMATA.—The following is a description, in a recent number of the *Allgemeine Wiener Medizinische Zeitung*, by Dr. R. Fiechtner, of Basel, of a method of making and using pancreatic enemata. The quantity of injection advised for an adult is from 200 to 400 grammes (about 6 to 12 ounces), *two-thirds* of which should consist of beef, and *one-third* of pancreas. The beef and pancreas must be quite fresh, free from fat and skin, and intimately mixed together; a little warm water (under 39° C.) is added. This gland, called by butchers the sweetbread, is very succulent if the animal is fed just before being slaughtered, and only those glands should be used which are loaded with their peculiar secretion. Their weight is about 300 to 400 grammes each, while not more than 100 to 130 grammes (about 3 to 4 ounces) are required for the enema. The remainder, however, cannot be used for the next operation, as it soon decays; a fresh gland is therefore necessary. In places where beasts are not daily slaughtered the gland can be preserved. It must be cut into very small pieces and rubbed up with pure glycerin into a panada. The pancreatic ferment is dissolved and preserved by the glycerin (see Wittich in *Pflüger's Archiv*, 1869-70). This compound

of pancreas and glycerin can then be mixed with the minced beef, as required, and without any hindrance to its absorption by the intestinal mucous membrane. The enema should be administered by means of a strong syringe. We have generally used the forcing syringe described by Leube, which can be screwed to a table, and which, by means of a lever, admits of our employing a good deal of pressure; this increased pressure being absolutely necessary to overcome the obstacle presented by the tube to the passage of such a pultaceous (or sausage-like) mixture. If the common clyster-syringe is used, it should then be provided with a long elastic tube, or, better still, an English stomach-pump tube, which is connected with the syringe by a piece of india-rubber tubing, and provided at its end with a small centrally-bored nozzle made of horn or some other material. By a contrivance of this kind the surgeon is able to propel the injection far up without running the risk of injuring the gut; and in our cases the tube was always introduced to the extent of eighteen inches. The further this nutrient enema reaches, the greater will be the extent of the absorbing surface, and the greater the rapidity with which the ingesta are absorbed and taken up by the system. In one of our patients, in whom a post-mortem examination was made twenty-four hours after an enema of this kind had been administered, a part of the injected matter was found as far up as the cæcum and transverse colon. Lastly, before resorting to this operation, the bowel should be well cleaned out by an ordinary injection of water, and, if possible, the nutrient enema should be withheld for twenty-four hours, so as to admit of the bowel being emptied on the following day.—*Medical Press and Circular*.

BEEF-MOLASSES.—We learn from the *Sucree Indigène* that, in consequence of the low price of molasses, attempts are being made in France to introduce it in the place of manure. It is used either in a liquid form, diluted with seven parts of water, or as a powder; and just at this moment it is cheaper than ordinary manure, while it contains all its essential elements in equal abundance. As soon, however, as the cold weather comes on, the molasses will again be required for cattle-feeding purposes, and will probably rise to a price at which it would be useless for manure.—*Journal of Applied Science*.

A PRACTICAL JOKE.—It is reported in *La Tribune Médicale*, September 12, 1875, under the heading "*Une Plaisanterie des Sauvages*," that Dr. Boeckel was recently consulted by a wood-chopper, who was troubled by obstinate constipation. A purgative injection producing only an aggravation of his symptoms, the doctor made an exploration of the rectal cavity, and discovered and withdrew seventy living snails, which had been introduced per anum by the companions of his patient while the latter was dead drunk.

PERSONAL.—Prof. Moriz Schiff, of Florence, has been awarded a prize of twenty thousand francs, by the Academy of Medicine of Turin, for his work on the "Phrenology and Pathology of the Nervous System."—*The Medical and Surgical Reporter*.

FORCIBLE, THOUGH IRREVERENT.—In a recent clinical lecture at Vienna, Ziesl, dwelling upon the fact that syphilis is never cured, affirmed of those who had the disease, "In the day of judgment they will rise syphilitic."

OFFICIAL LIST

OF CHANGES OF STATIONS AND DUTIES OF OFFICERS OF THE MEDICAL DEPARTMENT U.S. ARMY FROM NOVEMBER 7, 1875, TO NOVEMBER 20, 1875, INCLUSIVE.

STERNBERG, GRO. M., ASSISTANT-SURGEON.—Granted leave of absence, on Surgeon's Certificate of Disability, for six months from November 1, 1875, with permission to go beyond sea. S. O. 227, A. G. O., November 9, 1875.

WILLIAMS, J. W., ASSISTANT-SURGEON.—Leave of absence extended one month, with permission to apply for a further extension of one month. S. O. 113, Military Division of the Missouri, November 5, 1875.

KOERPER, E. A., ASSISTANT-SURGEON.—Ordered before Army Medical Board, New York City, for examination for promotion, and, upon its completion, to report in person to Commanding General, Department of the Platte, for assignment to duty. S. O. 226, A. G. O., November 8, 1875.

O'REILLY, R. M., ASSISTANT-SURGEON.—Assigned to duty as Post-Surgeon at Fort Ontario, New York. S. O. 227, Military Division of the Atlantic, November 12, 1875.

HEIZMANN, C. L., ASSISTANT-SURGEON.—Assigned to duty as Post-Surgeon at Fort Wood, New York Harbor. S. O. 229, Military Division of the Atlantic, November 15, 1875.

WHITE, R. H., ASSISTANT-SURGEON.—Relieved from duty in Military Division of the Atlantic, and to report to the Commanding General, Department of Texas, for assignment to duty. S. O. 226, c. s., A. G. O.

KING, J. H. T., ASSISTANT-SURGEON.—Ordered before Army Medical Board, New York City, for examination for promotion, and, upon its completion, to report to Commanding General, Department of Texas, for assignment to duty. S. O. 226, c. s., A. G. O.

HALL, J. D., ASSISTANT-SURGEON.—Assigned to duty as Post-Surgeon at Fort Independence, Boston Harbor, Mass. S. O. 229, c. s., Military Division of the Atlantic.

HARVEY, PHIL. F., ASSISTANT-SURGEON.—When relieved by Assistant-Surgeon Hall, assigned to duty as Post-Surgeon at Fort Wayne, Michigan. S. O. 229, c. s., Military Division of the Atlantic.

COWDREY, S. G., ASSISTANT-SURGEON.—To accompany Fifth Regiment of Artillery to Department of the Gulf, and, on arrival there, report by letter to the Commanding General of that Department for assignment to duty. S. O. 226, c. s., A. G. O.

HALL, W. R., ASSISTANT-SURGEON.—Relieved from duty in Military Division of the Atlantic, and to report in person to Commanding General, Department of the Columbia, for assignment to duty. S. O. 226, c. s., A. G. O.

TORNEY, G. H., ASSISTANT-SURGEON.—To accompany Fifth Regiment of Artillery to Department of the Gulf, and, on arrival there, to report by letter to the Commanding General of that Department for assignment to duty. S. O. 226, c. s., A. G. O.

CROMPTON, L. W., ASSISTANT-SURGEON.—Assigned to duty at Natchitoches, La. S. O. 198, Department of the Gulf, November 4, 1875.

ROSSON, R. L., ASSISTANT-SURGEON.—Relieved from duty in Military Division of the Atlantic, and to report in person to the Commanding Officer, Department of Arizona, for assignment to duty. S. O. 226, c. s., A. G. O.

GARDINER, J. DE B. W., ASSISTANT-SURGEON.—To report by letter to the Commanding Officer, Department of Arizona, for assignment to duty. S. O. 230, A. G. O., November 15, 1875.